U.S. Department of the Interior
Bureau of Land Management
White River Field Office
73544 Hwy 64
Meeker, CO 81641

ENVIRONMENTAL ASSESSMENT

NUMBER: CO-110-2006-065-EA

CASEFILE/PROJECT NUMBER: COC69318 trespass
COC34348 amendment
COC67123 amendment

PROJECT NAME: 4 trespass power lines in Chevron Field

LEGAL DESCRIPTION: Sixth Principal Meridian
T. 2N., R. 102W.,
sec. 18, N½NW¼,
T. 2N., R. 103W.,
sec. 13, NE¼NE¼,
sec. 15, SE¼SE¼.

APPLICANT: Moon Lake Electric

ISSUES AND CONCERNS: Power lines built in trespass

DESCRIPTION OF PROPOSED ACTION AND ALTERNATIVES:

Background/Introduction: While conducting on-sites in the Rangely field for Chevron USA, a White River Field Office (WRFO) employee observed Moon Lake Electric constructing a power line in an area that she believed had not been authorized. When it was researched, the line under construction was for fee wells and was not a BLM right-of-way (ROW). However, during this record search, it was discovered that 4 other lines had been built without authorization. Moon Lake was issued a Notice of Trespass on November 8, 2005. They have checked their internal records, and have submitted an application to authorize the lines and clear the trespass. According to 43CFR 2808.11(e), BLM will not process any applications for any activities on BLM lands, until the trespasser complies with the requirements of resolving the trespass. Chevron has requested the electric service to pumps for their newly developed wells.

Proposed Action: Moon Lake Electric has applied for authorization for four (4) power line extensions which have been constructed in the Chevron Rangely Field. They state that this construction was done without BLM authorization due to miscommunication between the Colorado and Utah offices.

Well Number	location	Length (feet)	Number of poles	Area (20' wide) in acres
Gray B 25X	T2N R102W sec18	1350	4	0.61
Gray B 26X	T2N R102W sec18	180	1	0.08
Gray B 27X	T2N R103W sec13	200	1	0.09
MC Haygood 14X	T2N R103W sec15	700	2	0.32
TOTALS		**2430**	**8**	**1.12**

The power lines consist of single wooden poles with cross arms supporting aluminum conductors. Raptor protection is incorporated into the structure design to meet or exceed the guidelines found in the "Suggested Practices for Raptor Protection on Power lines".

There was no blade work or excavation done during construction with the exception of the holes for poles and anchors. All access was and will be from existing roads and along the right-of-way. Surface disturbance was kept to a minimum and confined to the right-of-way. Rubber tired vehicles were used for construction.

Because the new lines are located in the Rangely oil field which now has numerous power lines and oil well facilities, the additional visual impacts will be minimal. Wood poles and not-reflective conductors are used.

Moon Lake Electric is an equal opportunity employer and will not exclude any person from employment due to race, creed, color, national origin, sex, or disability. There are no PCBs or any hazardous materials used in the construction, operation, or maintenance of the line. Moon Lake electric employees, contractors, and agents will protect all public survey monuments and markers from disturbance.

Moon Lake will keep the power lines in safe and usable condition at all times in accordance with the National Electrical Safety Code. Maintenance activities will not be performed when soil conditions are too wet to adequately support vehicles and equipment except in emergency situations. If equipment creates ruts in excess of three inches deep, all maintenance work will be postponed if possible until conditions are suitable. If maintenance is required for immediate repair of the power line, Moon Lake electric will be responsible for the rehabilitation of disturbed area.

Moon Lake will do everything in reason within its power to prevent fires on or near the construction area during the construction of said line and throughout the term of the right-of-way. Each vehicle used on the job site will be equipped with a radio and fire extinguisher. All litter will be taken off the job site.

Alternative B: The four power lines would not be authorized. Moon Lake would be required to remove the poles, anchors, cable, and fittings. All disturbance from the removal would be recontoured and revegetated. Chevron USA, as the user of the electrical service, would not receive electricity and would have to seek another, undetermined, method of powering their oil production.

No Action Alternative: The constructed power lines would not be authorized and would remain in trespass. This would be contrary to BLM regulations as stated in 43CFR Part 2800.

ALTERNATIVES CONSIDERED BUT NOT CARRIED FORWARD:

NEED FOR THE ACTION: Moon Lake has constructed these four lines without authorization. This unauthorized development must be regularized or terminated. The power lines are needed to provide electrical service to oil wells which have been approved and drilled within the Chevron Rangely Field.

PLAN CONFORMANCE REVIEW: The Proposed Action is subject to and has been reviewed for conformance with the following plan (43 CFR 1610.5, BLM 1617.3):

Name of Plan: White River Record of Decision and Approved Resource Management Plan (ROD/RMP).

Date Approved: July 1, 1997

Decision Number/Page: Pages 2-49 thru 2-52

Decision Language: "To make public lands available for the siting of public and private facilities through the issuance of applicable land use authorizations, in a manner that provides for reasonable protection of other resource values."

AFFECTED ENVIRONMENT / ENVIRONMENTAL CONSEQUENCES / MITIGATION MEASURES:

STANDARDS FOR PUBLIC LAND HEALTH: In January 1997, Colorado Bureau of Land Management (BLM) approved the Standards for Public Land Health. These standards cover upland soils, riparian systems, plant and animal communities, threatened and endangered species, and water quality. Standards describe conditions needed to sustain public land health and relate to all uses of the public lands. Because a standard exists for these five categories, a finding must be made for each of them in an environmental analysis. These findings are located in specific elements listed below:

CRITICAL ELEMENTS

AIR QUALITY

Affected Environment: The entire White River Resource area has been classified as either attainment or unclassified for all pollutants, and most of the area has been designated prevention of significant deterioration (PSD) class II. The proposed action is located approximately 7 miles southeast of Dinosaur Natl. Monument Visitor Center which is a Class II airshed with special designations regarding visibility. The proposed action alone should not greatly compromise National Ambient Air Quality Standards (NAAQS) on an hourly or daily basis.

Environmental Consequences of the Proposed Action: The proposed action is to authorize the four previously constructed power line extensions. Authorizing these existing structures will have no additional impacts on the air quality.

Environmental Consequences of the Alternative B: Removal of existing power line extensions will cause unnecessary surface disturbance which would increase potential for production of fugitive particulate matter temporarily decreasing air quality.

Environmental Consequences of the No Action Alternative: None

Mitigation: Re-vegetate disturbed areas with a BLM approved seed mixture as outlined in the vegetation section of this document.

CULTURAL RESOURCES

Affected Environment: The trespass power lines are located in the Rangely Field which is covered by an inventory (Larralde 1981, Compliance Dated 2/18/1981) and an agreement with the Colorado SHPO due to the extensive existing disturbance in the field. There are no known cultural resources in any of the power line areas.

Environmental Consequences of the Proposed Action: The constructed power lines have not impacted any previously recorded cultural resources in the Rangely Field.

Environmental Consequences of the Alternative B: The removal of the power lines would not impact any previously recorded cultural resources in the Rangely Field

Environmental Consequences of the No Action Alternative: There would be no new impacts to known cultural resources under the No Action Alternative.

Mitigation: 1. The operator is responsible for informing all persons who are associated with the project operations that they will be subject to prosecution for knowingly disturbing historic or archaeological sites, or for collecting artifacts. If historic or archaeological materials are uncovered during any project or construction activities, the operator is to immediately stop activities in the immediate area of the find that might further disturb such materials, and immediately contact the authorized officer (AO). Within five working days the AO will inform the operator as to:

- whether the materials appear eligible for the National Register of Historic Places
- the mitigation measures the operator will likely have to undertake before the site can be used (assuming in situ preservation is not necessary)
- a timeframe for the AO to complete an expedited review under 36 CFR 800-11 to confirm, through the State Historic Preservation Officer, that the findings of the AO are correct and that mitigation is appropriate.

If the operator wishes, at any time, to relocate activities to avoid the expense of mitigation and/or the delays associated with this process, the AO will assume responsibility for whatever recordation and stabilization of the exposed materials may be required. Otherwise, the operator will be responsible for mitigation cost. The AO will provide technical and procedural guidelines for the conduct of mitigation. Upon verification from the AO that the required mitigation has been completed, the operator will then be allowed to resume construction.

2. Pursuant to 43 CFR 10.4(g) the holder of this authorization must notify the AO, by telephone, with written confirmation, immediately upon the discovery of human remains, funerary items, sacred objects, or objects of cultural patrimony. Further, pursuant to 43 CFR 10.4(c) and (d), you must stop activities in the vicinity of the discovery and protect it for 30 days or until notified to proceed by the authorized officer.

INVASIVE, NON-NATIVE SPECIES

Affected Environment: The proposed action is located within Alkaline Slope ecological sites, which is dominated by salt tolerant vegetation. The dominate plant community for these sites consist of greasewood, Wyoming big sagebrush, and various saltbrushes such as shadscale, gardner saltbrush, mat saltbush, and fourwing saltbrush. The understory of these shrubs is dominated by western wheatgrass, salina wildrye, and squirreltail. Cheatgrass and halogeton are both annual plant species that are undesirable, invasive, and non-native plants which are present within the locality of the proposed action. Both of these species are highly adapted to disturbed soils.

The soils within the project area are principally a Chipeta Silty Clay Loam (Clayey Saltdesert ecological site). These soil types have a high clay content that is moderate to highly erosive and receives low precipitation with rapid runoff, thus limiting forage production, increasing erosion/sediment runoff, and hampering re-vegetation efforts leading to the potential establishment of invasive species.

Drought conditions, outside of this current year, have been very prevalent within the Coal Oil Basin area, which has hampered the successful establishment of reclaimed plant species of other projects in this area. Therefore, undesirable and invasive annual plant species (i.e. halogeton, cheatgrass) have become dominate in portions of previously disturbed areas which provide little resource value and hinder efforts to meet Public Land Health Standards.

Environmental Consequences of the Proposed Action: Weed species found in the area are effectively controlled by establishment of seeded species within disturbed areas. The proposed seed mix from the RMP (Standard Seed Mix #1), which includes non-native species, is recommended because its associated plant species are highly adapted to this site (heavy clay soils) and offer the greatest opportunity to establish vegetation cover. Limiting factors for successful reclamation of the site includes soils with a high clay content, low annual precipitation, drought prone, and cheatgrass establishment on the adjacent rangelands. These mitigated non-native species have demonstrated themselves to have the greatest ability to

establish, provide soil protection, and offer a competitive interaction against invasive, non-native species such as cheatgrass.

Prompt reclamation with successful establishment would help prevent cheatgrass and halogeton from establishing on disturbed sites. If other noxious weeds were to invade the site, prompt control would prevent movement to the adjacent plant communities.

There has been an opportunity for other noxious weed species to be transported onto landscapes associated with the proposed action by the past construction and/or associated support equipment.

Environmental Consequences of the Alternative B: Removal of the existing trespass power lines would entail a second level of ground disturbance associated with the required equipment and vehicles. This level of disturbance will allow another opportunity for non-native and invasive species to establish and require another revegetation effort. Also, removing the trespass power lines would not curtail the need that they serve. Thus, it is foreseeable that an additional application would be submitted for other power lines to fulfill this void that would again superimpose an additional level of disturbance, which may increase the likelihood of the establishment of invasive, non-native plants species.

Environmental Consequences of the No Action Alternative: None

Mitigation: The applicant shall monitor the disturbed and reclaimed areas for the presence of invasive, non-native, and/or noxious plant species that have become established as a result of the proposed action. The applicant will be responsible for controlling cheatgrass, noxious weeds, and/or problem weeds should they occur and/or increase in density as a result of the proposed action.

Upon detection of noxious, non-native, and/or invasive plant species, the applicant will control their presence before seed production using materials and methods as outlined in the RMP and/or authorized in advance by the White River Field Office Manager. Application of herbicides must be under field supervision of an EPA certified pesticide applicator. Herbicides must be registered by the EPA and application proposals must be approved by the BLM.

MIGRATORY BIRDS

Affected Environment: The trespass power lines are encompassed by arid salt desert shrublands consisting principally of shadscale, matt and Gardner saltbush, rabbitbrush, snakeweed and big sagebrush. Herbaceous groundcover is comprised mainly of cheatgrass with introduced and native grasses scattered throughout. These salt desert communities typically support several migratory bird species which fulfill nesting functions between late-May through mid-July including vesper and sage sparrow, western meadowlark, sage thrasher and horned lark.

Environmental Consequences of the Proposed Action: It is unlikely the construction of these power lines had any negative impacts on the breeding functions of migratory birds. The

power lines were constructed along existing roads and/or rights-of-ways – areas which typically assume little nesting activity. Construction of these lines was extremely small-scale (~1 ac) and involved little to no surface disturbance/vegetation removal. Any involvement with suitable nest habitat would have been minor, as these community types comprise about 10,000 acres in Coal Oil Basin.

Environmental Consequences of the Alternative B: Removal of the existing power lines would involve another incident of disturbance which may have the potential to negatively impact breeding functions (most likely by altering vegetation available for nesting and foraging purposes). It is likely another application would be requested to serve the need of the original power lines. This would involve yet another level of disturbance, again potentially disrupting breeding functions of migratory birds and altering vegetation available for nesting and foraging purposes.

Environmental Consequences of the No Action Alternative: The no-action alternative would not have any potential to influence the reproductive activities or habitat of migratory birds.

Mitigation: See discussion in Vegetation Section with regards to reclamation.

THREATENED, ENDANGERED, AND SENSITIVE ANIMAL SPECIES (includes a finding on Standard 4)

Affected Environment: The area surrounding the power lines is broadly encompassed by white-tailed prairie dog habitat. Prairie dogs and their burrow systems are important components of burrowing owl habitat, as well as potential habitat for reintroduced populations of black-footed ferret. Burrowing owls, a State threatened species are uncommon in this Resource Area. These birds return to occupy a maintained burrow system in early April and begin nesting soon after. Most birds have left the area by September. While burrowing owls have been documented in Rangely Oil Field, no burrowing owl nesting activity has been recorded near the four power line corridors.

Under the auspices of a non-essential, experimental population rule, black-footed ferrets have been released annually in Coyote Basin (eight miles southwest) and Wolf Creek (13 miles northeast) of Rangely Oil Field since 1999 and 2001, respectively. The rule applies to any ferrets that may occupy or eventually be released in northwest Colorado and northeast Utah. Although there is no direct continuity between Coyote Basin or Wolf Creek and the project site (i.e., lesser physical barriers and habitats unoccupied by prairie dog) there is a strong likelihood that ferrets have colonized and successfully breed in Rangely Oil Field. Ferrets are wholly reliant on prairie dogs for food and shelter. Ferret breeding activities begin in early March, with birthing beginning in early May. Young ferrets generally begin to emerge by mid-July. There have been no verified sightings of ferrets, nor any known reproduction occurring in Rangely Oil Field.

Environmental Consequences of the Proposed Action: The construction of these power lines would have no direct affect on the reproductive success of black-footed ferrets or

burrowing owl however; indirectly these power lines (poles) may enhance the potential for depredation of both prairie dogs and black-footed ferrets by raptors due to the increased availability of perches.

Environmental Consequences of the Alternative B: Removal of the existing power lines would involve another incident of disturbance which may have the potential to negatively impact special status species (most likely by altering vegetation available for foraging purposes). It is likely another application would be requested to serve the need of the original power lines. This would involve yet another level of disturbance, again potentially impacting special status species.

Environmental Consequences of the No Action Alternative: There would be no potential influence on prairie dogs as habitat for burrowing owl and black-footed ferret in the case of a no action alternative.

Mitigation: In an effort to deter raptor perching and electrocution, it is recommended that all wood poles involved with this action be retrofit with perch spikes (or some other suitable deterrent) on the top of the center pole and along cross arms.

See discussion in Vegetation Section with regards to reclamation.

Finding on the Public Land Health Standard for Threatened & Endangered species: Public Land Health Standards for those special status species associated with white-tailed prairie dogs, including black-footed ferret and burrowing owl, in Chevron Field are currently met. As conditioned, this project would have no adverse influence on populations, available extent of suitable habitat, or the reproductive activities of these three species. Thus, there would be no influence on meeting the land health standard. Small incremental gains in perennial grass cover associated with successful reclamation associated with power line installation may be expected to bolster local populations of prairie dogs and potentially benefit individual burrowing owl and black-footed ferret—effects consistent with continued meeting of the Land Health Standards.

WASTES, HAZARDOUS OR SOLID

Affected Environment: There are no known hazardous or other solid wastes on the subject lands. No hazardous materials are known to have been used, stored or disposed of at sites included in the project area.

Environmental Consequences of the Proposed Action: No listed or extremely hazardous materials in excess of threshold quantities are proposed for use in this project. While commercial preparations of fuels and lubricants proposed for use may contain some hazardous constituents, they would be stored, used and transported in a manner consistent with applicable laws, and the generation of hazardous wastes would not be anticipated. Solid wastes would be properly disposed of.

Environmental Consequences of the Alternative B: Potential impacts would remain the same as the Proposed Action, or increase because of the second disturbance.

Environmental Consequences of the No Action Alternative: No hazardous or other solid wastes would be generated under the no-action alternative.

Mitigation: The applicant shall be required to collect and properly dispose of any solid wastes generated by the proposed actions.

WATER QUALITY, SURFACE AND GROUND (includes a finding on Standard 5)

Affected Environment: Surface Water: The proposed action is situated within the Stinking Water Creek catchment area. Stinking Water Creek is a tributary to the White River and is situated in stream segment 22 of the White River Basin. Stinking Water Creek flows primarily in response to snow melt, groundwater discharge and precipitation events (see Table 1). Table 1 contains historic water quality and flow data for Stinking Water Creek near Rangely, CO. Note that high values for specific conductance (SC) correspond with low flow periods (ground water discharge [base flow]) while lower SC values are associated with periods of higher flow. This correlation indicates that normal surface runoff is of fair water quality while SC readings taken during low flows are skewed by the geology and soil chemistry of the channel bottom at the point of measurement.

Table 1:	**Stinking Water Creek-Near Rangely, CO (T2N, R102W, Sect. 32 SENE)**					
Date	Temp. ©	SC	pH	Type of Meas.	Discharge (cfs)	Comments
4/9/1981	--	--	--	OBS	0.000	Dry
5/4/1981	20	1,890	7.6	Rod	5.99	
10/13/1981	7.9	1,120	7.9	Rod	31.9	~100-200' above bridge
4/12/1982	16	30,700	--	Rod	0.020	~100-200' above bridge
5/11/1982	21.5	31,890	--	Rod	0.100	~100-200' above bridge
11/4/1982	8	16,500	--	Volumetric	0.005	~100-200' above bridge
4/6/1983	5.3	20,000	7.9	Rod	0.032	SC pegged meter
5/4/1983	12.8	7,940	8.3	Rod	0.425	
6/1/1983	23.8	27,000	8.3	Volumetric	0.008	Lab SC
7/11/1983	--	--	--	OBS	0.000	Dry
4/6/1984	8.5	9,430	8.2	Rod	0.600	
5/11/1984	21.4	3,430	8.3	Rod	2.14	
6/30/1984	26.9	20,000	8.2	Volumetric	0.004	SC pegged meter
7/24/1984	32.6	7,560	7.8	Volumetric	0.011	
9/5/1984	--	--	--	OBS	0.000	Dry
4/16/1985	10.1	7,580	8.2	Volumetric	0.004	
5/17/1985	22.3	12,520	8.2	Volumetric	0.005	
6/7/1985	21.1	2,140	8.4	Rod	8.33	
7/26/1985	--	--	--	OBS	0.000	Dry
4/10/1986	12.8	2,830	8.3	Rod	3.15	
5/29/1986	25.1	14,430	8	Volumetric	0.040	
7/2/1986	--	--	--	OBS	0.000	Dry
5/9/1988	22	4,920	7.9	Volumetric	0.002	
6/8/1988	--	--	--	OBS	0.000	Dry

A review of the Colorado's 1989 Nonpoint Source Assessment Report (plus updates), the 305(b) report, the 303(d) list, the White River ROD/RMP, and the Unified Watershed Assessment was done to see if any water quality concerns have been identified. It should be noted that the White River from Douglas Creek to the state line is listed on the states monitoring and evaluation list (M&E list) as being sediment impaired. In addition, the White River ROD/RMP has identified this portion of the White River as NOT meeting state water quality standards for suspended sediment, salinity, and nutrients. Stinking Water Creek has been listed in the White River ROD/RMP as a proposed fragile watershed.

The State has classified stream segment 22 as "Use Protected". Stream segment 22 has been further designated by the state as being beneficial for the following uses: Warm Aquatic Life 2, Recreation 1b, and Agriculture. The antidegredation review requirements in the Antidegredation Rule are not applicable to waters designated use-protected. For those waters, only the protection specified in each reach will apply. For stream segment 22, minimum standards for four parameters have been listed. These parameters are: dissolved oxygen = 5.0 mg/l, pH = 6.5 - 9.0, Fecal Coliform = 325/100 ml, and 205/100 ml E. coli.

Ground Water: A review of the US Geological Survey Ground Water Atlas of the United States (Topper et al., 2003) was done to assess ground water resources at the location of the proposed actions. Information presented in Topper et al. (2003) indicates the extent of the Mesaverde aquifer encompasses the area know as the "Coal Oil Basin" north of Rangely, CO. The proposed locations are situated on the surface geologic formation known as the Mancos Shale (Cretaceous). The Mancos Shale (confining unit) has an approximate thickness of 7,000'feet. This unit is comprised primarily of shale however within the unit, the Frontier Sandstone may occur as a local aquifer which is of poor water quality (highly saline).

Environmental Consequences of the Proposed Action: The proposed action is to authorize the four previously constructed power line extensions. Authorizing these existing structures will have no additional impacts on surface or ground water quality. However, failure to re-vegetate disturbed surfaces with preferred species may result in increased erosive potential and elevate sediment/salt loads to Stinking Water Creek, the White River and eventually the Colorado River.

Environmental Consequences of the Alternative B: Removal of existing power line extensions will cause unnecessary surface disturbance. Additional surface disturbance would increase potential for soil erosion and increase sediment/salt loads to Stinking Water Creek, the White River and eventually the Colorado River.

Environmental Consequences of the No Action Alternative: None

Mitigation: Mitigate potential impacts to surface water by restricting non emergency maintenance activities on power lines when soils become saturated to a depth of three inches or more (as outlined in the proposed actions). In addition, disturbed surfaces shall be revegetated with BLM preferred seed mixture as outlined in the vegetation section of this document.

Finding on the Public Land Health Standard for water quality: Stream segment 22 is currently listed as meeting water quality standards. Stinking Water Creek is a tributary to the White River (Segment 21) which is listed on the states M&E list for sediment impairment, any increase in sedimentation to Stinking Water Creek will directly impact segment 21 of the White River. However, with suggested mitigation, water quality within the Stinking Water Creek catchment area will remain unchanged and no deterioration of water quality down stream is anticipated as a result of the proposed actions.

WETLANDS AND RIPARIAN ZONES (includes a finding on Standard 2)

Affected Environment: There are no wetlands or riparian habitats conceivably affected by this action. The White River, representing the nearest aquatic habitat, is separated from the project area by about eight miles of ephemeral channel.

Environmental Consequences of the Proposed Action: The proposed action would have no influence on wetland or riparian areas.

Environmental Consequences of the Alternative B: Alternative B would have no influence on wetland or riparian areas.

Environmental Consequences of the No Action Alternative: The no-action alternative would have no influence on wetland or riparian areas.

Mitigation: None

Finding on the Public Land Health Standard for riparian systems: This project would have no conceivable influence on wetland or riparian conditions addressed in the Standards.

CRITICAL ELEMENTS NOT PRESENT OR NOT AFFECTED:

No ACEC's, flood plains, prime and unique farmlands, or Wild and Scenic Rivers, threatened, endangered or sensitive plants exist within the area affected by the proposed action. For threatened, endangered and sensitive plant species Public Land Health Standard is not applicable since neither the proposed nor the no-action alternative would have any influence on populations of, or habitats potentially occupied by, special status plants. There are also no Native American religious or environmental justice concerns associated with the proposed action.

NON-CRITICAL ELEMENTS

The following elements **must** be addressed due to the involvement of Standards for Public Land Health:

SOILS (includes a finding on Standard 1)

Affected Environment: The following data is a product of an order III soil survey conducted by the Natural Resources Conservation Service (NRCS). The accompanying table highlights important soil characteristics. A complete summary of this information can be found at the White River Field Office.

Soil Number	Soil Name	Slope	Affected acres (R=10m)	Ecological site	Salinity	Run Off	Erosion Potential	Bedrock
16	Chipeta silty clay loam	3-25%	3.53	Clayey Saltdesert	4-16	Rapid	High	10-20
17	Chipeta silty clay loam eroded	3-25%	0.12	Clayey Saltdesert	4-16	Rapid	Very high	10-20

Control surface use (CSU-1) "saline soils" have been encountered at all of the four locations. Within a 10 meter radius, 3.64 acres of "saline soils" (99.7% of all affected acreage) have been impacted by construction of the power line extensions. However, given the degree of previous surface disturbance in the area, lack of topography, and suggested mitigation, an engineered construction/reclamation plan will NOT be required for the existing lines.

16-Chipeta silty clay loam (3 to 25 percent slopes) is a shallow, well drained soil located on low, rolling hills and on toe slopes. It formed in residuum derived from calcareous, gypsiferous shale. The native vegetation is mainly salt-tolerant shrubs and grasses. Elevation is 5,100 to 5,800 feet. The average annual precipitation is 7 to 9 inches, the average annual air temperature is 46 to 50 degrees F, and the average frost-free period is 105 to 135 days. Typically, the surface layer is light brownish gray silty clay loam about 3 inches thick. The next layer is light olive gray silty clay about 6 inches thick. The underlying material is light olive gray silty clay that has fine shale chips and seams of crystalline gypsum and is about 9 inches thick. Shale is at a depth of 18 inches. Depth to shale ranges from 10 to 20 inches. Permeability of this Chipeta soil is slow. Available water capacity is low. Effective rooting depth is 10 to 20 inches. Runoff is rapid, and the hazard of water erosion is high. This unit is poorly suited to urban development.

17-Chipeta silty clay loam (3 to 25 percent slopes) is a shallow, well drained soil found on low, rolling hills and on toe slopes. It formed in residuum derived from calcareous, gypsiferous shale. The native vegetation is mainly sparse stands of salt-tolerant desert shrubs and grasses. Elevation is 5,100 to 5,800 feet. The average annual precipitation is 7 to 9 inches, the average annual air temperature is 46 to 50 degrees F, and the average frost-free period is 105 to 135 days. Typically, the surface layer is light brownish gray silty clay loam 2 inches thick. The underlying material is light brownish gray silty clay that has fine chips of shale and seams of crystalline gypsum and is about 10 inches thick. Shale is at a depth of 12 inches. Depth to shale ranges from 10 to 20 inches. Permeability of this eroded Chipeta soil is slow. Available water capacity is very low. Effective rooting depth is 7 to 20 inches. Runoff is rapid, and the hazard of water erosion is very high. This unit is very poorly suited to urban development.

Environmental Consequences of the Proposed Action: Refer to the water quality portion of this document.

Environmental Consequences of the Alternative B: Refer to the water quality portion of this document.

Environmental Consequences of the No Action Alternative: None

Mitigation: Refer to the water quality portion of this document.

Finding on the Public Land Health Standard for upland soils: Predominance of cheat grass, halogeton, and other non desirable plant species combined with existing oil and gas developments (roads, well pads, pipe lines, power lines …) have reduced infiltration and permeability rates resulting in increased soil erosion. As a result, these locations do not meet standards for upland soils. With suggested mitigation as outlined in the water quality section of this document, soil health near the proposed actions can move towards achieving land health standards.

VEGETATION (includes a finding on Standard 3)

Affected Environment: The proposed action is located within a Clayey Saltdesert ecological site, which is dominated by salt tolerant vegetation. The dominate plant community for these sites consist of greasewood (*Sarcobatus vermiculatus)* and various saltbrushes such as shadscale (*Atriplex confertifolia)*, gardner saltbrush (*Atriplex gardneri*), mat saltbush (*Atriplex corrugate),* and fourwing saltbrush (*Atriplex canescens*). Other brushes intermixed in the area are various rabbitbrushes (*Chrysothamnus spp.)* and Wyoming big sagebrush (*Artemisia tridentata)*. The understory of these shrubs primarily consists of western wheatgrass (*Agropyron smithii*), salina wildrye (*Elymus salinus*), sandberg bluegrass (*poa secunda*), and bottlebrush squirreltail (*Sitanion hystrix*). Cheatgrass (*Bromus tectorum*) and halogeton (*Halogeton glomeratus*) are undesirable, invasive, and alien plant species that are present within the locality of the proposed action.

The soils within the project area are principally a Chipeta Silty Clay Loam, 0-25% slopes (Clayey Saltdesert ecological site). This soil type has a high clay content that is moderate to highly erosive and receives low precipitation with rapid runoff, thus limiting vegetative production and hampering re-vegetation efforts.

Drought conditions, outside of this current year, have been very prevalent within the Coal Oil Basin area which has hampered the successful establishment of reclaimed plant species of other projects in this area. Therefore, undesirable and invasive annual plant species (i.e. halogeton, cheatgrass) have become dominant in portions of previously disturbed areas which provide little resource value and hinder efforts to meet Public Land Health Standards.

Environmental Consequences of the Proposed Action: The proposed action has disturbed a mid to low seral class of saltdesert shrub community for a total of 1.12 BLM acres considered short term. These Short-term soil and vegetation disturbances would be offset by successfully reclaiming the disturbed area with a seed mix that is suited for this ecological site. As this area

has a component of cheatgrass and halogeton (undesirable, non-native, and annual plant species) within the plant community, successful re-vegetation efforts would slightly increase desirable plant species within the rangelands.

Without successful reclamation of seeded species within this harsh landscape, a potential exist to increase the ground cover of undesirable plant species that invade disturbed sites. Limiting factors for successful reclamation of the site includes soils with a high clay content, low annual precipitation, drought prone, grazing use, and cheatgrass (invasive, non-native, and annual grass) establishment on the adjacent rangelands.

Previously this area has entailed considerable impacts from oil and gas activities from a network of well pads, power lines, pipeline corridors, and access roads; which have resulted in a fragmentation and reduction of available/productive ecological sites.

Environmental Consequences of the Alternative B: Removing the trespass power lines would entail a second level of disturbance and activity within the clayey saltdesert ecological site. Therefore, rehabilitation efforts to establish a desired vegetation component would be impeded within the vicinity of the power lines. Removing the power lines would not curtail the need that they serve. Thus, it is foreseeable that an additional application would be submitted for other power lines to fulfill this void that would again superimpose an additional level of disturbance within the landscape's plant community.

Environmental Consequences of the No Action Alternative: None

Mitigation: Promptly re-vegetate all disturbed areas with Standard Seed Mix #1 of the White River Resource Area Resource Management Plan (RMP), B-19, Appendix B (see table below). Seeding rates in the RMP are shown as pounds of Pure Live Seed (PLS) per acre and apply to drill seeding. For broadcast application, double the seeding rate and then harrow to insure seed coverage. Applied seed must be certified and free of noxious weeds.

Standard Seed Mix #	Species (Variety)	Lbs PLS/Acre
1	Siberian wheatgrass (P27)	3
	Russian wildrye (Bozoisky)	2
	Crested wheatgrass (Hycrest)	3

The applicant shall be required to achieve a reclamation success rate of sufficient vegetative ground cover from reclamation plant species within three growing seasons. The reclamation shall be comparable of that of the nearby undisturbed plant communities at a Potential Natural Community (PNC) state in relation to the seed mix as deemed appropriate by the BLM.

Finding on the Public Land Health Standard for plant and animal communities (partial, see also Wildlife, Aquatic and Wildlife, Terrestrial)*:* The proposed action has disturbed a segment of the Clayey Saltdesert ecological site. Therefore, the action has further fragmented these areas to a minimal degree.

Early seral ecological sites associated with the proposed action lack desirable plant species at an appreciable density and frequency level, thus they are not meeting standards. This is largely due to the prevalence of cheatgrass and halogeton within the vegetative understory. Mid seral

ecological sites at the proposed action locality have acceptable components within the plant community and are meeting standards for public land health.

WILDLIFE, AQUATIC (includes a finding on Standard 3)

Affected Environment: There are no aquatic habitats conceivably affected by this action. The White River, representing the nearest aquatic habitat, is separated from the project area by about eight miles of ephemeral channel.

Environmental Consequences of the Proposed Action: The proposed action would have no influence on aquatic wildlife or associated habitats.

Environmental Consequences of the Alternative B: Alternative B would have no influence on aquatic wildlife or associated habitats.

Environmental Consequences of the No Action Alternative: The no-action alternative would have no influence on aquatic wildlife or associated habitats.

Mitigation: None

Finding on the Public Land Health Standard for plant and animal communities (partial, see also Vegetation and Wildlife, Terrestrial): This project would have no conceivable influence on aquatic wildlife or habitat conditions addressed in the Standards.

WILDLIFE, TERRESTRIAL (includes a finding on Standard 3)

Affected Environment: Much of Chevron Field is inhabited year-round by a small resident herd of pronghorn. These animals are acclimated to routine oil and gas production activities. A number of raptors forage opportunistically during the winter in Chevron Field, the most common being rough-legged hawks, red-tailed hawks, and golden eagle. The project area and the surrounding area provide no special or unique habitat features (e.g., nesting substrate) or forage base for these birds.

Environmental Consequences of the Proposed Action: It is unlikely the construction of the trespass power lines had any negative impacts on big game distribution or habitat quality. Acreage involved with this action is extremely minimal (~ 1 ac) and involved relatively no vegetation removal.

Vehicle travel associated with construction of these lines may potentially impact vegetation by increasing the amount of undesirable species, however, proper reclamation procedures would provide the opportunity to increase the perennial grass component on these corridors in the longer term, increasing ground cover and seed production and prolonging the availability of green herbaceous forage for resident big and non-game animals.

Environmental Consequences of the Alternative B: Removal of the existing power lines would involve another incident of disturbance which may have the potential to increase undesirable plant species along the corridor(s). It is likely another application would be requested to serve the need of the original power lines. This would involve yet another level of disturbance, which may have the potential to increase undesirable plant species thus altering availability of forage for big and non-game animals.

Environmental Consequences of the No Action Alternative: There would be no potential influence on terrestrial wildlife or associated habitats in the case of a no action alternative.

Mitigation: See T & E Section above with regards to possible raptor electrocution and perch deterrent issues.

See discussion in Vegetation Section with regards to reclamation.

Finding on the Public Land Health Standard for plant and animal communities (partial, see also Vegetation and Wildlife, Aquatic): Much of the ground cover within the Rangely Field is dominated by annual weeds. Although these sites in and of themselves cannot be considered meeting the definition of the land health standard, the majority of the shrubland communities comprising this landscape likely retain sufficient character to support viable populations of resident wildlife, although likely at populations reduced from potential. Subsequent reclamation offers an opportunity to reestablish herbaceous forage and cover conditions (i.e., redevelopment of a perennial bunchgrass component) more consistent with the proper functioning of these arid salt desert communities as wildlife habitat, thus better opportunity to meet the land health standard.

OTHER NON-CRITICAL ELEMENTS: For the following elements, only those brought forward for analysis will be addressed further.

Non-Critical Element	NA or Not Present	Applicable or Present, No Impact	Applicable & Present and Brought Forward for Analysis
Access and Transportation		X	
Cadastral Survey	X		
Fire Management	X		
Forest Management	X		
Geology and Minerals		X	
Hydrology/Water Rights			
Law Enforcement		X	
Noise		X	
Paleontology			X
Rangeland Management			X
Realty Authorizations			X
Recreation		X	

Non-Critical Element	NA or Not Present	Applicable or Present, No Impact	Applicable & Present and Brought Forward for Analysis
Socio-Economics		X	
Visual Resources			X
Wild Horses	X		

PALEONTOLOGY

Affected Environment: The trespass power lines are located in an are generally mapped as Mancos Shale (Tweto 1979) which the BLM, WRFO has classified as a Condition II fossil bearing formation meaning it is known to produce fossils but the recorded majority are marine invertebrates. Very rarely marine vertebrates may occur and such fossils are considered scientifically important.

Environmental Consequences of the Proposed Action: Unless extensive blading to construct a work area was involved it is unlikely that significant fossils were impacted. It is virtually impossible to assess the damage that may have been done to fossil resources when an auger is used to excavate a hole for a power pole or similar items.

Environmental Consequences of the Alternative B: Unless extensive blading is used to remove the poles it is unlikely that significant fossils would be impacted.

Environmental Consequences of the No Action Alternative: There would be no new impacts to fossil resources under the No Action Alternative.

Mitigation: None

RANGELAND MANAGEMENT

Affected Environment: The proposed action is located in the Coal Oil Basin section of the Artesia allotment (06308), which is authorized for sheep use by Morapos Sheep Company. Grazing use by sheep in the allotment can be authorized from December 1st through April 20th.

Soils within the project area are principally a Chipeta Silty Clay Loam, 3-25% Slopes (Clayey Saltdesert ecological site), which are dominated by a salt tolerant desert shrub and grass community. These brush/grass communities are utilized by sheep for meeting forage requirements, particularly during winter months. Soils in Coal Oil Basin typically have a high clay content that are moderate to highly erosive and receives low precipitation with rapid runoff, thus limiting forage production and hampering re-vegetation efforts.

Drought conditions, outside of this current year, have been very prevalent within the Coal Oil Basin area, which has hindered successful establishment of reclaimed plant species of other related disturbances in this area. Therefore, undesirable and invasive annual plant species (i.e.

halogeton, cheatgrass) have become dominate in a portion of these disturbed areas which provide little forage and/or resource value.

Environmental Consequences of the Proposed Action: The individual proposed action would have minimal impacts on the authorized grazing use because the amount of new surface disturbance (1.12 BLM acres) is nominal in regards to the scale of the allotment (44,026 BLM acres).

The 1.12 BLM acres of disturbance that has occurred is considered a short term disturbance with successful rehabilitation as it is associated with 8 power poles over 2430 feet. Therefore, there is no opportunity of long-term active Animal Unit Month (AUM) loss associated with the individual proposed action. An AUM is the amount of forage necessary for the substance of 5 sheep (1 cow) for a period of 1 month. However, previously this allotment has entailed considerable impacts from oil and gas activities, which have resulted in a reduction and fragmentation of available rangelands and in a loss of forage for grazing use.

Without successful reclamation of seeded species within this harsh rangeland, a potential exist to increase the ground cover of undesirable plant species that invade disturbed sites, thus decreasing available forage for livestock.

Overall, this individual proposed action would have no significant direct impact on the authorized AUMs in the allotments. However, the cumulative impacts from past, present, and possible future oil and gas activities may have a long-term effect on the native rangeland's carrying capacity, thus influencing authorized AUMs. This possible affect would be determined during the grazing permit renewal process which includes an evaluation of forage capacity available for livestock. It is foreseeable that the grazing permit holder could loose a portion of permitted active AUMs due to a loss of forage and fragmentation of the rangelands associated with oil and gas development within the authorized BLM grazing allotment.

Environmental Consequences of the Alternative B: Removing the existing trespass power lines would entail a second level of activity and disturbance level. Therefore, potential impacts to rangeland management associated with removing the power lines and its associated human activities would have potential impacts such as modification in sheep distribution, impediments to livestock grazing and movement, and injury and losses of livestock due to heavy truck travel.

Environmental Consequences of the No Action Alternative: None

Mitigation: Any livestock control facilities and/or rangeland improvements impacted during this operation will be replaced or repaired to their prior condition.

REALTY AUTHORIZATIONS

Affected Environment: The projects will take place in the existing Rangely oil field. This is a developed field with an electrical system network to serve the Chevron operation. Chevron

operations are permitted with APDs within the lease and unit boundaries. Power lines are authorized by grants to Moon Lake Electric.

Environmental Consequences of the Proposed Action: The power lines to Gray B 25X, 26X, and 27X will be authorized as an amendment to COC67123. Authorization for the MC Hagood A 14X line will be as an amendment to COC 34348. The trespass action has been serialized as case COC69318, and was resolved and closed January 23, 2006.

Environmental Consequences of the Alternative B: The power lines would be removed and no authorization would be needed. The trespass action has been serialized as case COC69318, and was resolved and closed January 23, 2006. If an alternative method of supplying electrical service to the wells is proposed, that action would require analysis and appropriate authorization.

Environmental Consequences of the No Action Alternative: Allowing construction and operation of the power lines without authorization would be contrary to regulation.

Mitigation: none

VISUAL RESOURCES

Affected Environment: The proposed action would be located in an area with a VRM IV classification. The objective of this class is to provide for management activities which require major modification of the existing character of the landscape. The level of change to the characteristic landscape can be high. These management activities may dominate the view and be the major focus of viewer attention. However, every attempt should be made to minimize the impact of these activities through careful location, minimal disturbance, and repeating the basic elements.

Environmental Consequences of the Proposed Action: The proposed action would be in an area that presently has numerous existing power poles, power lines, oil producing facilities and other man made structures. By using non-reflective conductors as stated in proposed action, a casual observer traveling in the area would not have their major focus of attention drawn to the new power lines. Modification to the existing character of the landscape would be low and the objectives of the VRM IV classification would be retained.

Environmental Consequences of the Alternative B: There would be no impact.

Environmental Consequences of the No Action Alternative: There would be no impact.

Mitigation: None

CUMULATIVE IMPACTS SUMMARY: The Cumulative impacts of oil and gas developments in this area were analyzed in the White River ROD/RMP, based on a reasonable foreseeable development scenario which assumed a total of ten acres per well pad. This action is

consistent with the scope of impacts addressed in the White River ROD/RMP. The cumulative impacts of this type of activity, was addressed in the White River ROD/RMP for each resource value that would be affected by the proposed action. These power line extensions will serve wells within the Chevron Rangely Field, a developed area, and will not significantly increase cumulative impacts.

REFERENCES CITED:

Larralde, Signa L.
1981 Cultural Resource Inventory of a Sample of BLM Lands in the Rangely Oil Field, Rio Blanco County, Northwestern, Colorado. Nickens and Associates, Montrose, Colorado.

Topper, R., K.L. Spray, W.H. Bellis, J.L. Hamilton, and P.E. Barkmann. 2003. Groundwater Atlas of Colorado, Special Publication 53. Prepared for State of Colorado Department of Natural Resources, Division of Minerals and Geology. Colorado Geological Survey. Denver, Colorado.

Tweto, Ogden
1979 Geologic Map of Colorado. Unites States Geologic Survey, Department of the Interior, Reston, Virginia.

PERSONS / AGENCIES CONSULTED: None

INTERDISCIPLINARY REVIEW:

Name	Title	Area of Responsibility
Nate Dieterich	Hydrologist	Air Quality, Water Quality, Surface and Ground Hydrology and Water Rights
Tamara Meagley	Natural Resource Specialist	Areas of Critical Environmental Concern, Threatened and Endangered Plant Species
Gabrielle Elliott	Archaeologist	Cultural Resources, Paleontological Resources
Jed Carling	Rangeland Management Specialist	Invasive, Non-Native Species, Wetlands and Riparian Zones, Soils, Vegetation, Rangeland Management
Lisa Belmonte	Wildlife Biologist	Migratory Birds, Threatened, Endangered and Sensitive Animal Species, Terrestrial and Aquatic Wildlife
Melissa J. Kindall	Collateral Hazmat	Wastes, Hazardous or Solid
Chris Ham	Outdoor Recreation Planner	Wilderness, Access and Transportation, Recreation, Visual Resources
Ken Holsinger	Natural Resource Specialist	Fire Management
Robert Fowler	Forester	Forest Management
Paul Daggett	Mining Engineer	Geology and Minerals
Linda Jones	Realty Specialist	Realty Authorizations, Wild Horses

Finding of No Significant Impact/Decision Record (FONSI/DR)

CO-110-2006-065-EA

FINDING OF NO SIGNIFICANT IMPACT (FONSI)/RATIONALE: The environmental assessment and analyzing the environmental effects of the proposed action have been reviewed. The approved mitigation measures (listed below) result in a Finding of No Significant Impact on the human environment. Therefore, an environmental impact statement is not necessary to further analyze the environmental effects of the proposed action.

DECISION/RATIONALE: It is my decision to approve the authorization for the construction, operation, maintenance, and termination of power line extensions to serve wells in the Rangely Chevron Oil Field as described in the proposed action, with the mitigation measures listed below. This development, with mitigation, is consistent with the decisions in the White River ROD/RMP, and environmental impacts will be minimal.

Alternative B, removal of the power lines, would involve a second layer of activity and disturbance which could increase the possibility for impacts to resources but would leave unresolved the need for electrical service which initiated the project. The associated trespass action, COC69318, has been settled and closed.

MITIGATION MEASURES:

1. In an effort to deter raptor perching and electrocution, all wood poles involved with this action shall be retrofitted with perch spikes (or some other suitable deterrent) on the top of the center pole and along cross arms.

2. The operator shall promptly re-vegetate all disturbed areas with Standard Seed Mix #1 of the White River Resource Area Resource Management Plan (RMP), B-19, Appendix B (see table below). Seeding rates in the RMP are shown as pounds of Pure Live Seed (PLS) per acre and apply to drill seeding. For broadcast application, double the seeding rate and then harrow to insure seed coverage. Applied seed must be certified and free of noxious weeds.

Standard Seed Mix #	Species (Variety)	Lbs PLS/Acre
1	Siberian wheatgrass (P27)	3
	Russian wildrye (Bozoisky)	2

Standard Seed Mix #	Species (Variety)	Lbs PLS/Acre
	Crested wheatgrass (Hycrest)	3

The applicant shall be required to achieve a reclamation success rate of sufficient vegetative ground cover from reclamation plant species within three growing seasons. The reclamation shall be comparable of that of the nearby undisturbed plant communities at a Potential Natural Community (PNC) state in relation to the seed mix as deemed appropriate by the BLM.

3. The applicant shall monitor the disturbed and reclaimed areas for the presence of invasive, non-native, and/or noxious plant species that have become established as a result of the proposed action. The applicant will be responsible for controlling cheatgrass, noxious weeds, and/or problem weeds should they occur and/or increase in density as a result of the proposed action.

   Upon detection of noxious, non-native, and/or invasive plant species, the applicant will control their presence before seed production using materials and methods as outlined in the RMP and/or authorized in advance by the White River Field Office Manager. Application of herbicides must be under field supervision of an EPA certified pesticide applicator. Herbicides must be registered by the EPA and application proposals must be approved by the BLM.

4. Potential impacts to surface water shall be mitigated by restricting non emergency maintenance activities on power lines when soils become saturated to a depth of three inches or more (as outlined in the proposed actions).

5. The applicant shall be required to collect and properly dispose of any solid wastes generated by the proposed actions.

6. Any livestock control facilities and/or rangeland improvements impacted during this operation will be replaced or repaired to their prior condition.

7. The operator is responsible for informing all persons who are associated with the project operations that they will be subject to prosecution for knowingly disturbing historic or archaeological sites, or for collecting artifacts. If historic or archaeological materials are uncovered during any project or construction activities, the operator is to immediately stop activities in the immediate area of the find that might further disturb such materials, and immediately contact the authorized officer (AO). Within five working days the AO will inform the operator as to:

   - whether the materials appear eligible for the National Register of Historic Places
   - the mitigation measures the operator will likely have to undertake before the site can be used (assuming in situ preservation is not necessary)
   - a timeframe for the AO to complete an expedited review under 36 CFR 800-

11 to confirm, through the State Historic Preservation Officer, that the findings of the AO are correct and that mitigation is appropriate.

If the operator wishes, at any time, to relocate activities to avoid the expense of mitigation and/or the delays associated with this process, the AO will assume responsibility for whatever recordation and stabilization of the exposed materials may be required. Otherwise, the operator will be responsible for mitigation cost. The AO will provide technical and procedural guidelines for the conduct of mitigation. Upon verification from the AO that the required mitigation has been completed, the operator will then be allowed to resume construction.

8. Pursuant to 43 CFR 10.4(g) the holder of this authorization must notify the AO, by telephone, with written confirmation, immediately upon the discovery of human remains, funerary items, sacred objects, or objects of cultural patrimony. Further, pursuant to 43 CFR 10.4(c) and (d), you must stop activities in the vicinity of the discovery and protect it for 30 days or until notified to proceed by the authorized officer.

COMPLIANCE/MONITORING: Monitoring shall be performed at five year intervals by White River Field Office staff.

NAME OF PREPARER: Linda Jones

NAME OF ENVIRONMENTAL COORDINATOR: Caroline Hollowed

SIGNATURE OF AUTHORIZED OFFICIAL: Kent E. Walter
Field Manager

DATE SIGNED: 04/03/06

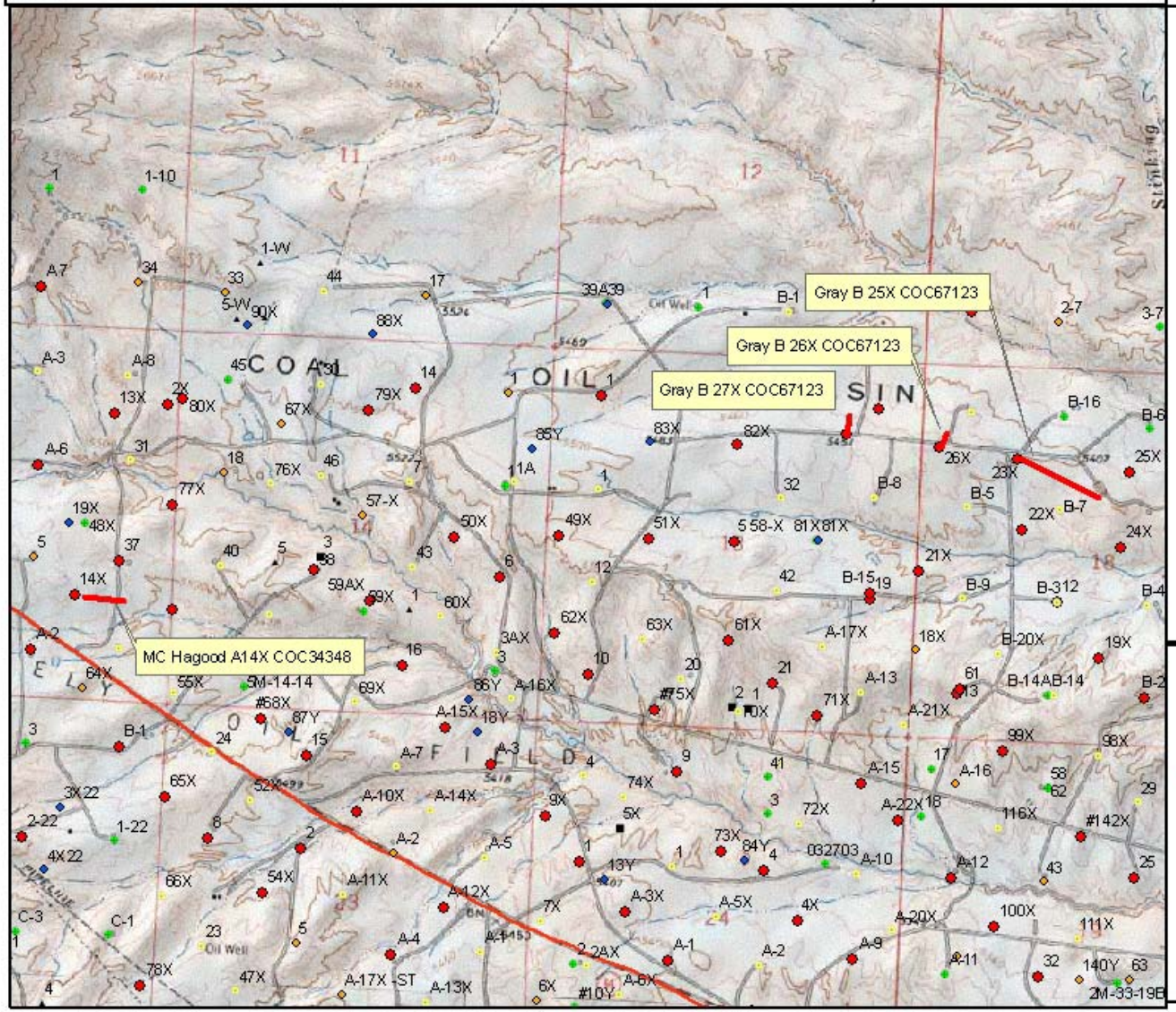
ATTACHMENTS: Exhibit A, Map

CO-110-2006-065-EA 24

4 MOON LAKE POWER LINES - CHEVRON FIELD
CO-110-06-065-EA
T1N R102W sec 18 and T1N R103W sec 13, 15

EXHIBIT A

3/28/2006



LEGEND

- Abandoned Location
- Dry & Abandoned
- DM
- Injection
- Plugged&Abandoned
- Producing
- Shut In
- Temp& Abandoned
- Unknown
- Verbal Plugging
- Waiting on Completion
- XX

Major roads

RD_CODE

- Highway
- County
- NPS
- Forest service
- BLM
- Field office boundary

0 15 30 60
Miles
1:24,000

N